analyzed using standard descriptive statistics. Results: 113 patients met inclusion criteria. Indications for naloxone administration were: level of consciousness (50.5%), respiratory depression (4.0%), miosis (1.0%), a combination of factors (19.8%), or undocumented (24.8%). Median initial dose was 0.40 mg (IQR: 0.20-0.40 mg). Median total naloxone administered in the ED was 0.48 mg (IQR: 0.35-1.2 mg). The initial dose resulted in a response in 43.1% of patients, with 36.0% of responding patients later experiencing subsequent respiratory depression. 31% of patients received a naloxone infusion. Initial dose in patients with cardiopulmonary compromise was significantly different only comparing patients who received CPR versus those who did not (median 0.40 mg; IQR: 0.20-0.80 mg; P = 0.019). Four patients experienced emesis following naloxone. Median length of ED stay was 7.0 hours (IQR: 4.0-9.5 hours), and median hospital length of stay was 3.0 days (IQR: 1.0-5.0 days). Median ED observation time prior to discharge was 4.0 hours (IQR: 2.0-8.0 hours). Ultimate disposition home, to the ward, or to the intensive care unit was 47.1%, 42.2%, and 9.8% respectively (1.0% deceased). Conclusion: The dose and usage of naloxone by ED physicians in this study is variable. Further prospective studies are needed to determine the effective naloxone dosing strategy.

Keywords: naloxone, opioid, overdose

## P132

Optimizing a physician surge protocol to address emergency department wait times during times of increased patient demand <u>T. Bhate, BSc, MD, MHSc</u>, S. Dowling, BA, MD, N. Collins, MD, University of Calgary, Calgary, AB

Background: Emergency Department overcrowding remains a significant problem. Interventions have often focused on areas external to the ED, with patient flow in the ED receiving less attention. Efforts to address ED flow are complicated by daily fluctuations in patient volume and acuity. Our local protocol brings in additional physicians when internal metrics indicate patient demand can't be met by current physician resources (a 'surge' period). However, anecdotal evidence suggests a lack of satisfaction and efficacy. We therefore undertook a project to improve our local management of these surge periods. Aim Statement: To improve the effectiveness of an ED Physician Surge Protocol to allow for a physician scheduling strategy that is reflective of the needs of the ED. Measures & Design: This project consists of 3 phases. Phase 1 was an analysis of current surge metrics (including frequency, temporal patterns and physician response), with concurrent literature search to identify any best practices or easily addressable protocol changes, with first planned PDSA cycle. Phase 2 is a mixed methods survey of local staff to identify barriers and enablers of our current protocol, concurrent with a national survey of current practices. Phase 3 will be the implementation of a revised protocol, followed by a second mixed methods survey and analysis of metrics of interest. Evaluation/Results: Analysis of surge data (Oct 2018-Oct 2019) demonstrated a high volume of surges per month (78.7 +/- 10.9), highest at Foothills Medical Centre (94.3). Across all sites, afternoon periods had highest frequency of surges (absolute peak 1400 - 1500) with a secondary peak 2200-2300, both peaks occurring most frequently on weekends (Fri-Sun) However, physician response to surge calls was < 10% (5.8-9.1%), with no discernable temporal pattern, even accounting for the significant number of automatic surge calls cancelled by clinicians. Analysis of data, in addition to literature review and engagement with senior administration suggested no immediate protocol changes, therefore project moved to 2nd phase. This phase is currently in progress, with planned analysis using Pareto Chart methodology. **Discussion/Impact**: Our initial data clearly demonstrates that current procedures are inadequate to address this ongoing issue, with no readily apparent solutions. Analysis of local barriers and enablers is currently underway, in addition to a national survey, with the results expected to inform an extensive redesign of current procedures.

**Keywords:** emergency department flow, emergency department staffing, quality improvement and patient safety

## P133

A novel addictions curriculum for emergency medicine residents B. Bérczi, BMBS, BComm, <u>K. Chan, MD, BEng</u>, McMaster University, Hamilton, ON

Innovation Concept: In the era of the current opioid crisis, addiction medicine is becoming a core competency of patient care. Despite the prevalence of addiction-related presentations, there is a paucity of formal education on the topic in emergency medicine; with time and lack of qualified staff cited as barriers to implementation. We aimed to correct this gap in education through the curriculum design of an addictions elective that can be easily implemented by Emergency Medicine Program Directors across Canada. Methods: Learning objectives were developed based on expert consensus and the list of entrustable professional activities (EPAs) mandated by the Royal College. A local needs assessment was conducted to identify existing addictions curriculum and identify opportunities for improvement. Curriculum, Tool, or Material: A one-month block addictions selective was developed specifically for emergency medicine residents. Elements of this curriculum included a suggested schedule, a list of supplemental resources, and an evaluation tool to track EPAs. A pre and post survey was created for distribution to all participants to track knowledge acquisition and to collect feedback on the education intervention. In the 2019-2020 academic year, 4 residents participated in this selective and multiple have expressed interest for the future. Conclusion: In Ontario alone, the rate of opioid-related deaths has quadrupled and has escalated to a rate of 2 deaths every day. Alcohol and other substance use is commonly a chief concern, catalyst, or comorbidity for patient presentations in the emergency department. Our selective curriculum seeks to address a gap for emergency medicine residents. Ongoing program evaluation will take place to continue to optimize this learning experience.

Keywords: addictions, innovations in education, opioids

## P134

## Orthopedic procedural videos as teaching tools in emergency medicine

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**Innovation Concept:** Video has been proven to be an effective educational tool that is valued by learners and objectively improves knowledge and testing scores. It can simplify complex concepts and is more efficient and effective than audio or reading in tests of 3-day material recall. Our objective in this project was to develop a series of instructional videos geared towards emergency and family physicians on proper application of casts and splints in the emergency department. **Methods:** We created two procedural videos, each 5-6 minutes long. They each reviewed the process, indications, and precise steps for application for each of two splints: the ulnar gutter and the thumb spica. After finalizing the videos, we created a survey